WHAT IS CLAIMED IS:

1. An immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with a peptide selected from the group consisting of hBNP, hBNP mimetics, GLP-1, GLP-1 mimetics, GLP-2, GLP-2 mimetics, exendin, exendin mimetics, glucagons, glucagon mimetics and PACAP-38.

2. An immunoglobulin molecule or fragment thereof according to claim 1 further comprising at least one flanking sequence including at least one amino acid covalently linked to at least one end of the peptide.

3. An immunoglobulin molecule or fragment thereof according to claim 1 wherein the immunoglobulin molecule fragment is selected from the group consisting of Fab fragment, $F(ab')_2$ fragment and ScFv fragment.

4. An immunoglobulin molecule or fragment thereof according to claim 1 wherein the immunoglobulin molecule is a full IgG molecule.

5. An immunoglobulin molecule or fragment thereof according to claim 1 wherein at least a portion of two CDRs are replaced with a peptide.

6. An immunoglobulin molecule or fragment thereof according to claim 5 wherein the two CDRs are both located on a heavy chain.

7. An immunoglobulin molecule or fragment thereof according to claim 5 wherein the two CDRs are a CDR3 of a heavy chain and a CDR2 of a heavy chain.

8. An immunoglobulin molecule or fragment thereof according to claim 1 wherein the immunoglobulin molecule or fragment thereof is human.

9. An immunoglobulin molecule or fragment thereof according to claim 1 wherein the immunoglobulin molecule or fragment thereof is anti-tetanus toxoid.

10. Nucleic acid encoding an immunoglobulin molecule or fragment thereof according to claim 1.

11. An expression vector comprising nucleic acid according to claim 10.

12. A host cell transformed with an expression vector according to claim 11.

13. A method of producing an immunoglobulin molecule or fragment thereof comprising culturing a host cell according to claim 12 under conditions suitable for expression of the immunoglobulin or fragment thereof.

14. A composition comprising an immunoglobulin or fragment thereof according to claim 1 and a pharmaceutically acceptable carrier.

15. A method of treating congestive heart failure comprising administering to a subject an immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with a peptide selected from the group consisting of hBNP and hBNP mimetics.

16. A method of treating diabetes comprising administering to a subject an immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with a peptide selected from the group consisting of, GLP-1, GLP-1 mimetics, GLP-2, GLP-2 mimetics, exendin, exendin mimetics, glucagons, glucagons mimetics and PACAP-38.

17. A method of treating obesity comprising administering to a subject an immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with a peptide selected from the group consisting of, GLP-1, GLP-1 mimetics, GLP-2, GLP-2 mimetics, exendin, exendin mimetics, glucagons, glucagons mimetics and PACAP-38.

18. A method of preserving or improving beta-cell function comprising administering to a subject an immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with GLP-1.

19. A method of inducing endothelial-dependent relaxation of preconstricted pulmonary artery rings comprising administering to a subject an immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with GLP-1.

20. A method comprising administering to a subject an immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with a thiazolidinedione derivative.

21. A method as in claim 20 wherein the thiazolidinedione derivative is a peroxisome proliferator-activated receptor-γ ligand.

22. A method of regulating adiponectin expression comprising administering to a subject an immunoglobulin molecule or fragment thereof comprising a region where amino acid residues corresponding to at least a portion of a complementarity determining regions (CDR) is replaced with a thiazolidinedione derivative.